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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/729,603	12/05/2003	Atsushi Tashiro	AP35930-071639.0144	1572
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

DLNYDOCKET@BAKERBOTTS.COM

Office Action Summary	Application No.	Applicant(s)	
	10/729,603	TASHIRO ET AL.	
	Examiner	Art Unit	
	AMY HSU	2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 February 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 2/19/2008 have been fully considered but they are not persuasive.

The rejections of Claims 1-18, see non-final rejection mailed 10/22/2007, are maintained and applicant's arguments are addressed below.

Regarding Applicant's argument that Anderson discloses storage or processed image data -- not unprocessed, full resolution bitmap image in a raw image file, in Applicant's REMARKS/ARGUMENTS page 3 Lines 10-12, Anderson teaches the CCD converts sampled light into unprocessed data (*Col 4 Lines 38-41 "generates a set of raw image data"*) and teaches a memory that stores the raw unprocessed image data (*Fig. 7 reference number 532 stores both raw and compressed image data, Col 5 Lines 49-50*). The area that the unprocessed image data is stored, reference number 532, is the raw image file. Therefore, Anderson is used to teach a digital camera with a memory that stores unprocessed data in a raw image file. Anderson also teaches an image processor which converts the unprocessed data to a first and second compressed image data but does not teach storage of all three of the image data (two compressed versions and the original data) together, as stated in the previous rejection (mailed 10/22/2007).

Regarding Applicant's argument that Nakagawa fails to disclose storing unprocessed bitmap data in a raw image file in REMARKS/ARGUMENTS page 3 lines 15-18, examiner uses Anderson to teach the digital camera with memory to store

unprocessed data in a raw image file as addressed above. Anderson teaches storage raw image data and two forms of compressed and processed image data however does not teach storage in relation to each other. One of ordinary skill in the art will realize that when it comes to the step of storage or raw and compressed image data, one could either store the data independently or store the data in an associated manner, or within the same memory area. Nakagawa was referenced not to teach what was already taught by Anderson of storage or raw uncompressed data and storage or compressed data, but to teach original data and data compressed based on the original data could be stored in an associated manner together. Fig. 5 of Nakagawa teaches a memory area that has allocation for original image data and two kinds of compressed image data based on the original image data.

Claim 1 uses the term "raw image file" to describe the area that stores initially the unprocessed bitmap data and also the first and second compressed image. Fig. 5 of Nakagawa is a memory area that stores both original data and two kinds of compressed data and is therefore considered the raw image file.

In the previous rejection, examiner uses Anderson which teaches storage of raw data in a memory area, and also storage or two kinds of compressed image data based on the raw data, but is silent on association of these files within storage. Nakagawa is used to teach the association of these files. One of ordinary skill in the art would be motivated to combine the teachings of Anderson in view of Nakagawa for at least the reason of giving the user a complete set of options regarding the image data. Often times the user only needs the compressed, processed version of the image captured,

but combining the teaching to store raw with processed data gives the user the additional option of bringing the raw data to another image processor such as a personal computer to perform processing and compression externally.

Lastly, in response to the applicant's argument that Makishima does not disclose or suggest a second display in REMARKS/ARGUMENTS page 6, Makishima teaches a display for the purpose of user interface (*Col 2 Lines 23-25 teaches the user can select resolution and compression details from a menu showing each option displayed on a monitor*), and additionally teaches a distinct display to replay image data (*Col 2 Lines 10-13*). Makishima may not teach two separate physical monitors or LCDs, however applicant's claim 2 limitations are interpreted as "display" meaning a showing or an exhibit. In other words, "display" is interpreted in the same way an email program displays an inbox within incoming messages, and separately and distinctly displays a new message composition box.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson (US 6847388) in view of Nakagawa et al. (US 6738092) further in view of Makishima et al. (US 6549307).

Regarding Claim 1, Anderson teaches a digital camera (*Fig. 1*) comprising: a light sensor capture device that samples light from an object to be photographed and converts the sampled light into unprocessed bitmap data (*Col 4 Lines 36-41*); a memory that stores the unprocessed bitmap data in a raw image file (*Col 5 Lines 49-51*); an image processor (*Col 4 Lines 21-22 describes the computer as the device that performs image processing*), wherein said image processor converts the unprocessed bitmap data into a first compressed image having a first resolution (*Col 8 Lines 9-12 describes a scrennail that is converted from the uncompressed image data and is of a first resolution, specifically a medium resolution*), converts the unprocessed bitmap data into a second compressed image having a second selectable resolution (*Col 7 Lines 61-64 describes a second compressed image comprising full-sized captured image and also describes that the user can choose the resolution in which images are captured*), and embeds the first compressed image and the second compressed along with an uncompressed low resolution version of the image (*Fig. 6*) but fails to teach the two compressed images stored in the same file as the original unprocessed raw data.

Nakagawa teaches a camera which stores in DRAM the original picture data and also two compressed versions, one is a thumbnail and one is a jpeg file, where results of compression of the original picture data (*Col 5 Lines 15-23*). It is well known to store an original unprocessed image data along with two compressed versions of the original image data. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teaching of Anderson with that of Nakagawa to store the unprocessed image data with two versions of compressed data in order to give

the user an immediate version associated with the original image data that is suitable for application such as printing or transferring externally.

Anderson in view of Nakagawa fail to teach a selector that facilitates selection of the second selectable resolution from one or more selectable resolution values.

Makishima teaches a similar digital camera and method where the user can select different resolutions using a selector. Makishima teaches a display or monitor attached to the camera where the user can select information such as resolution from a menu showing each option displayed the monitor (*Col 2 Lines 17-25*). Makishima teaches the user can select from different resolution values on the display such as the value of high resolution and the value of standard resolution (*Col 5 Lines 20-26*). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the apparatus taught by Anderson in view of Nakagawa, which allows the user to select a resolution, by allowing the user to use a selector via the camera's monitor to select a resolution among one or more resolution values because this would optimize the collection of user input in a way that is simple for the user.

Regarding Claim 2, Anderson in view of Nakagawa and Makishima teach the digital camera of claim 1, and Makishima further teaches a first display operable to show the one or more resolution values selectable for the second selectable resolution (*Col 2 Line 4 teaches an image displaying means and Lines 22-26 teaches the display shows a menu for a user to select a resolution*); and a second display operable to show at least one of said first compressed image and second compressed image wherein

said first display is distinct from said second display (*Col 2 Lines 10-13 teaches the camera may also comprise a function to display or replay the image data having been recorded separately from the image displaying means which displays the resolution selection. Col 5 Lines 17-19 teach that the data that has been recorded is the converted or processed data*). The teaching of Makishima would have been obvious to combine with Anderson in view of Nakagawa for the same rationale as above.

Regarding Claim 3, Anderson in view of Nakagawa further in view of Makishima teach the digital camera of claim 2 and Makishima further teaches said first display is operable to show which of the resolution values for the second selectable resolution is currently selected. Makishima teaches the display is operable to show which of the resolution values for the second selectable resolution is currently selected (*Col 5 Lines 26-28 describes after the resolution is selected the compression rate is then set. However, there is a point when the resolution is set by the user on the display and at this point the display shows which of the resolution values for the second selectable resolution is currently selected*). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the apparatus taught by Anderson which allows the user to select a resolution with the teachings of Makishima to allow the user to visually confirm on the display which of the resolution values was selected because this feature would optimize the user's experience by allowing him to confirm his selection and make changes at that point if necessary.

Regarding Claim 4, Anderson teaches the digital camera of claim 2 wherein said light sensor capture device comprises a charge-coupled device (*Col 4 Lines 36-41*).

Regarding Claim 5, Anderson teaches the digital camera of 2 wherein the first and second compressed images comprise JPEG images (*Col 7 Lines 61-64*).

Regarding Claim 6, Anderson the digital camera of claim 5 wherein the raw image file is in RAW format. (Col 4 Lines 38-41 describes the data from the image sensor is raw image data. Raw image data is inherently in RAW format, which includes a variety of manufacturer's proprietary formats, as there is no single standard raw format).

Regarding Claim 7, Anderson in view of Nakagawa and Makishima teaches the digital camera of claim 2 wherein the first resolution is suitable for generating thumbnail images on said second display. (*Anderson teaches in Col 7 Lines 49-51 two types of thumbnail images. Col 8 Lines 9-17 describes one of these two types of thumbnail images, specifically called a scrennail image, which is the first resolution image*). The second display, which displays the processed images, is addressed with Claim 2.

Regarding Claim 8, Anderson in view of Nakagawa and Makishima teach the digital camera of claim 7 where the user selects the resolution (*Col 9 Lines 9-12*) of a second, selectable resolution image file, but fails to specifically state the exact

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numerical dimension values of the selectable resolution. Official notice is taken of the fact that it is well known in the digital camera art that the following resolutions: 1440x960, 2304x1536, and 3024x2016, are common resolutions in high- end cameras and widely in use among digital camera manufactures. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the camera taught by Anderson which allows the user to set or select the resolution by providing the user with commonly used resolutions. This is because in order to optimize the quality of photography for typical users of digital cameras, the user input would require a choice of specific resolutions in numerical value that are commonly used and determined by digital camera manufacturers to be optimal in order for the user to set the resolution.

Regarding Claim 9, Anderson in view of Nakagawa and Makishima teach the digital camera of claim 8 wherein said first display is operable to show one or more icons, each icon corresponding to at least one of the one or more selectable resolution values. Anderson teaches that in different modes the LCD screen displays icons to facilitate the user interface functions (*Col 7 Lines 36-39*), but fails to teach icons specifically corresponding to one or more selectable resolution values. Makishima teaches on the screen the user can select resolution values (*Col 5 Lines 21-26*). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Anderson that uses icons in the user interface on the display with the teachings of Makishima which selects given resolution values by using

the icons to represent the given resolution values, because icons representing resolutions to choose from will facilitate the user input experience.

Claims 10-18 are method claims enabling the apparatus recited in respective Claims 1-9 and are therefore rejected using the same rationale as above.

Conclusion

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to AMY HSU whose telephone number is (571)270-3012. The examiner can normally be reached on M-F 8am-5pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Ho can be reached on 571-272-7365. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ARH 5/25/08

**/Tuan V Ho/
Primary Examiner, Art Unit 2622**